Total pages: 02

PG Agriculture M.Sc. Semester-II Examination, 2023 AGRONOMY PAPER: AGRON 512 (THEORY)

MCC/22/M.S ž ESTD 20

Time: 2 Hours

E CIT

(DRYLAND FARMING AND WATERSHED MANAGEMENT)

Full Marks: 40

GROUP-A

Answer any **FIVE** of the following questions:

 $2 \times 5 = 10$

- Define dry farming. 1.
- 2. What do you understand by drought prone areas?
- 3. Explain drought.
- How physiological drought affect the productivity of crops? 4.
- 5. What are the constituents of dry farming?
- 6. What do you understand by uncultivated fallow?
- Define watershed. 7.
- What do you understand by hydrology unit. 8.
- 9. What are the components of watershed management.
- 10. Define contingent drought.

GROUP-B

Answer any FOUR of the following questions:

5×4=20

- 1. Distinguish between dry farming, dryland farming and rainfed farming.
- 2. Explain efficiency of fallowing.
- 3. Explain the soil characteristics of northern region and central regions in dry farming areas.

4. How dew can be an essential factor in dry farming area?

- 5. Explain the role of bunding as a dry farming technology.
- 6. Discuss about the laddering and scooping in dry farming area.
- 7. Discuss the objectives of watershed management. Classify the watershed according to modified criteria of size.
- 8. What are the principles of watershed management?

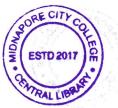
GROUP-C

Answer any <u>TWO</u> of the following questions:

$10 \times 2 = 20$

- 1. Discuss ploughing and fallowing as an important criterion for dry farming technology.
- 2. Discuss briefly about drought escaping and drought resistant mechanism of crops in dry farming areas.

(P.T.O.)



3. Discuss the mechanism of conserving water by crops on the basis of stomatal mechanism, effect of awns, stomatal frequency and location.

4. Discuss the components of watershed management. Write down any *ten* advantages of integrated watershed management.
